

FILE 'HOME' ENTERED AT 08:13:22 ON 23 APR 2007

=> file reg			
COST IN U.S. DOLLARS		SINCE FILE	TOTAL
		ENTRY	SESSION
FULL ESTIMATED COST		0.21	0.21

FILE 'REGISTRY' ENTERED AT 08:14:06 ON 23 APR 2007
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STRUCTURE FILE UPDATES: 20 APR 2007 HIGHEST RN 931582-00-2
DICTIONARY FILE UPDATES: 20 APR 2007 HIGHEST RN 931582-00-2

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TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

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REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

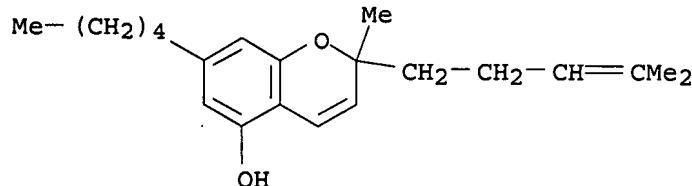
<http://www.cas.org/ONLINE/UG/regprops.html>

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=> E "CANNABICHROMENE"/CN 25
E1      1  CANNABICHROME/CN
E2      1  CANNABICHROMENATE SYNTHASE/CN
E3      1  --> CANNABICHROMENE/CN
E4      1  CANNABICHROMENE 3,5-DINITROCARBANILATE/CN
E5      1  CANNABICHROMENE GLUCURONIDE/CN
E6      1  CANNABICHROMENE, TETRAHYDRO-/CN
E7      1  CANNABICHROMENE, TETRAHYDRO-, (-)-/CN
E8      1  CANNABICHROMENE, TETRAHYDRO-, 3,5-DINITROCARBANILATE, (-)-/CN
E9      1  CANNABICHROMENIC ACID/CN
E10     1  CANNABICHROMENIC ACID SYNTHASE/CN
E11     1  CANNABICHROMEORCIN/CN
E12     1  CANNABICHROMEORCINIC ACID/CN
E13     1  CANNABICHROMEORCINIC ACID METHYL ESTER/CN
E14     1  CANNABICHROMEVARIN/CN
E15     1  CANNABICHROMEVARINIC ACID/CN
E16     1  CANNABICHROMEVARINIC ACID METHYL ESTER/CN
E17     1  CANNABICITRAN/CN
E18     1  CANNABICOUMARONONE/CN
E19     1  CANNABICYCLOL/CN
E20     1  CANNABICYCLOLIC ACID/CN
E21     1  CANNABICYCLOVARIN/CN
E22     1  CANNABIDIHYDROPHENANTHRENE/CN
E23     1  CANNABIDIOL/CN
E24     1  CANNABIDIOL 2',6'-DIACETATE/CN
E25     1  CANNABIDIOL ALDEHYDE DIACETATE/CN
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=> S E3
L1      1  CANNABICHROMENE/CN
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=> DIS L1 1 IDE
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L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN
RN 20675-51-8 REGISTRY
ED Entered STN: 16 Nov 1984
CN 2H-1-Benzopyran-5-ol, 2-methyl-2-(4-methyl-3-penten-1-yl)-7-pentyl- (CA
INDEX NAME)
OTHER CA INDEX NAMES:
CN 2H-1-Benzopyran-5-ol, 2-methyl-2-(4-methyl-3-pentenyl)-7-pentyl- (7CI,
8CI, 9CI)
OTHER NAMES:
CN (±)-Cannabichromene
CN Cannabichrome
CN Cannabichromene
CN Cannabichromene
CN NSC 291831
CN Pentylcannabichromene
DR 18793-28-7, 23559-86-6, 23701-99-7
MF C21 H30 O2
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD,
CAPLUS, CASREACT, DDFU, DRUGU, EMBASE, IPA, MEDLINE, NAPRALERT, RTECS*,
SPECINFO, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)

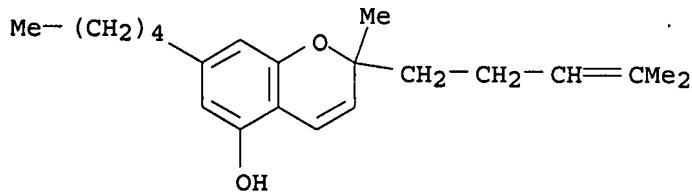


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

199 REFERENCES IN FILE CA (1907 TO DATE)
6 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
200 REFERENCES IN FILE CAPLUS (1907 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

THE ESTIMATED COST FOR THIS REQUEST IS 1.95 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN
RN 20675-51-8 REGISTRY
ED Entered STN: 16 Nov 1984
CN 2H-1-Benzopyran-5-ol, 2-methyl-2-(4-methyl-3-penten-1-yl)-7-pentyl- (CA
INDEX NAME)
OTHER CA INDEX NAMES:
CN 2H-1-Benzopyran-5-ol, 2-methyl-2-(4-methyl-3-pentenyl)-7-pentyl- (7CI,
8CI, 9CI)
OTHER NAMES:
CN (±)-Cannabichromene
CN Cannabichrome
CN Cannabichromene
CN Cannabichromene
CN NSC 291831
CN Pentylcannabichromene
DR 18793-28-7, 23559-86-6, 23701-99-7
MF C21 H30 O2
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD,
CAPLUS, CASREACT, DDFU, DRUGU, EMBASE, IPA, MEDLINE, NAPRALERT, RTECS*,
SPECINFO, TOXCENTER, USPAT2, USPATFULL
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199 REFERENCES IN FILE CA (1907 TO DATE)
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200 REFERENCES IN FILE CAPLUS (1907 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus\
'CAPLUS\' IS NOT A VALID FILE NAME
SESSION CONTINUES IN FILE 'REGISTRY'
Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files
that are available. If you have requested multiple files, you can
specify a corrected file name or you can enter "IGNORE" to continue
accessing the remaining file names entered.

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	7.80	8.01

FILE 'CAPLUS' ENTERED AT 08:15:18 ON 23 APR 2007
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FILE COVERS 1907 - 23 Apr 2007 VOL 146 ISS 18
FILE LAST UPDATED: 22 Apr 2007 (20070422/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

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=> s cannabichromene or 20675-51-8

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L3 200 L2

151 CANNABICHROMENE
9 CANNABICHROMENES
152 CANNABICHROMENE
(CANNABICHROMENE OR CANNABICHROMENES)

L4 221 CANNABICHROMENE OR L3

=> s depressi? or mood(a)disorder

97883 DEPRESSI?
7000 MOOD
123 MOODS
7063 MOOD
(MOOD OR MOODS)

258474 DISORDER
199324 DISORDERS
408037 DISORDER
(DISORDER OR DISORDERS)

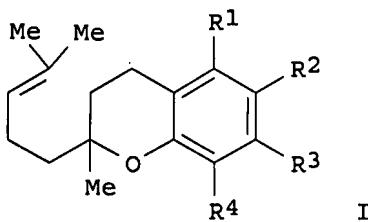
L5 2030 MOOD(A)DISORDER
98757 DEPRESSI? OR MOOD(A)DISORDER

=> s 14 and 15

L6 5 L4 AND L5

=> d ti au abs so py 1-5

L6 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
TI Pharmaceutical compositions comprising cannabichromene-type
compounds for the treatment of mood disorders
IN Musty, Richard E.; Deyo, Richard
GI



二

AB The invention relates to the use of cannabichromene-type compds. and derivs. thereof in the treatment of mood disorders. Compds. of the invention include I (r1 = OH; R2 = H, COOH; R3 - C1-8 alkyl; R4 = H) and derivs. thereof.

SO PCT Int. Appl., 35 pp.

CODEN: PIXXD2

PY 2005

2006

2006

L6 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

TI Intraocular pressure, ocular toxicity and neurotoxicity after administration of $\Delta 9$ -tetrahydrocannabinol or cannabichromene

AU Colasanti, Brenda K.; Powell, Stephen R.; Craig, Charles R.

AB $\Delta 9$ -THC [1972-08-3] or cannabichromene [20675-51-8], a structurally diverse naturally occurring cannabinoid, was delivered unilaterally to the corneas of cats either acutely by application of single drops or chronically via osmotic minipumps over a period of 9 days. Whereas $\Delta 9$ -THC only reduced intraocular pressure (IOP) minimally after acute administration, this cannabinoid produced substantial redns. in ocular tension during the entire period of chronic administration. Ocular toxicity during chronic treatment, however, was pronounced; conjunctival chemosis, erythema, and hyperemia were sustained, and corneal opacities approximating the site of drug delivery became evident within 3-5 days. In contrast, cannabichromene did not significantly alter IOP either acutely or during the 9 days of chronic administration, and ocular toxicity was not apparent. After systemic administration of $\Delta 9$ -THC to rats, a dose-related increase in the appearance of 8-13 Hz polyspike discharges became evident in the electrocorticogram during wakefulness and behavioral depression. These polyspikes subsequently reappeared during rapid eye movement (REM) sleep episodes. Cannabichromene was devoid of this effect. It appears that, in contrast with acute administration, chronic delivery of $\Delta 9$ -THC to cat eyes produces substantial redns. in IOP. The tension lowering effect, however, is accompanied by considerable ocular toxicity and neurotoxicity. As cannabichromene lacked these activities, the terpenoid portion of the cannabinoid structure appears to be important for their mediation.

SO Experimental Eye Research (1984), 38(1), 63-71

CODEN: EXERA6; ISSN: 0014-4835

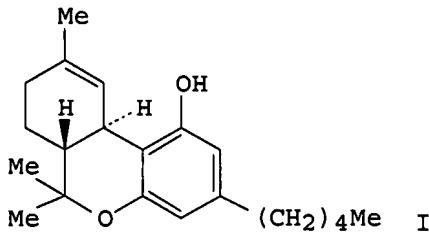
PY 1984

L6 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

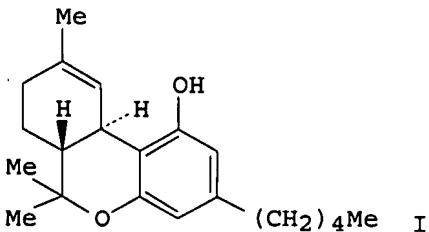
TI The effect of cannabichromene on mean blood pressure, heart rate, and respiration rate responses to tetrahydrocannabinol in the anesthetized rat

AU O'Neil, J. D.; Dalton, W. S.; Forney, R. B.

GI



AB Expts. were conducted to investigate the potential for interaction of cannabichromene (CBC) [20675-51-8], a major cannabinoid present in cannabis, and $\Delta 9$ -tetrahydrocannabinol (I) [1972-08-3], the primary active principle in cannabis. Male Wistar rats (220-260 g) were anesthetized with urethane and then given 2 mg/kg I, 10 mg/kg CBC, or bovine serum albumin vehicle according to a factorial (crossed) design. CBC had a hypotensive effect at the dose used in this study. CBC also caused a depression in respiration rate. When given alone, CBC had no effect on heart rate. The hypotensive effect and decreased respiration rate caused by I did not appear to be altered by simultaneous administration of CBC. CBC did, however, potentiate the decrease in heart rate caused by I. The mechanism of this interaction remains to be determined
SO Toxicology and Applied Pharmacology (1979), 49(2), 265-70
CODEN: TXAPPA9; **ISSN:** 0041-008X
PY 1979
L6 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
TI Acute and subacute inhalation toxicity of Turkish marihuana, cannabichromene, and cannabidiol in rats
AU Rosenkrantz, Harris; Hayden, David W.
GI



AB Rats were exposed to daily doses of smoke from Turkish marihuana containing cannabidiol (CBD) [13956-29-1], cannabichromene (CBCH) [20675-51-8], and $\Delta 9$ -tetrahydrocannabinol (I) [1972-08-3] or to smoke from placebo marihuana impregnated with CBD or CBCH. A 50% delayed lethal toxicity occurred in both sexes at the high dose of Turkish marihuana (0.2 mg cannabinoids/kg) with no deaths in CBD, CBCH, or placebo groups. Hypoactivity was observed by the second week among rats exposed to smoke from Turkish marihuana or placebo marihuana impregnated with CBD or CBCH. No hyperactivity or hypersensitivity was evident after tolerance developed to depressive signs. Turkish marihuana smoke suppressed growth rates and respiration rates more than did smoke containing CBD or CBCH without I. Hematol. variations were more closely associated with CBCH, but organ-weight changes were related to Turkish marihuana and CBD. The only drug-related histopathol. finding was seminiferous tubule degeneration with interference in sperm maturation. This dose-related effect was most severe in CBD-treated rats. Estimated LD50 values based on cannabinoid content were 10 mg/kg for Turkish marihuana smoke and approx. 35 mg/kg for smoke containing CBD or CBCH. Thus, CBD and CBCH contribute to the toxicity of marihuana smoke and influence the effects of I.

SO Toxicology and Applied Pharmacology (1979), 48(3), 375-86

CODEN: TXAPAP9; ISSN: 0041-008X

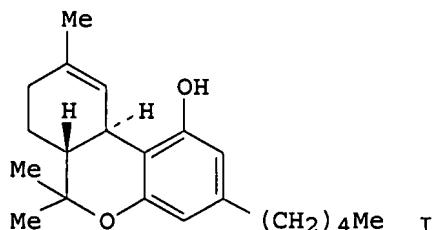
PY 1979

L6 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

TI Natural cannabinoids: apparent depression of nucleic acids and protein synthesis in cultured human lymphocytes

AU Nahas, G. G.; Desoize, B.; Armand, J. P.; Hsu, J.; Morishima, A.

GI



AB The lymphocyte response to phytohemagglutinin or to allogenic cells as measured by ³H-thymidine incorporation was equally inhibited by 10-5-10-4 M of $\Delta 8$ -tetrahydrocannabinol [5957-75-5] and $\Delta 9$ -tetrahydrocannabinol (I) [1972-08-3], their 11-hydroxy metabolites, cannabidiol [13956-29-1], cannabinol [521-35-7], cannabichromene [20675-51-8], and cannabicyclol [21366-63-2]. A similar inhibiting effect on T lymphocyte transformation was also produced by a similar concentration of olivetol [500-66-3]. I depressed ³H-leucine and ³H-uridine uptake in cultured lymphocytes stimulated with phytohemagglutinin. Cannabinoids may act directly on DNA formation by inhibition of precursor uptake and indirectly through inhibition of protein and RNA synthesis.

SO Pharmacol. Marihuana (1976), Volume 1, 177-86. Editor(s): Braude, Monique C.; Szara, Stephen. Publisher: Raven, New York, N. Y.

CODEN: 34AYA7

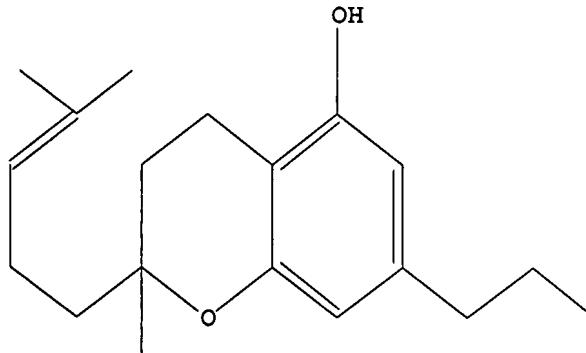
PY 1976

=>

>
Uploading C:\Program Files\Stnexp\Queries\cannabichromene.str

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 fam sam
SAMPLE SEARCH INITIATED 09:42:08 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 6 TO ITERATE

100.0% PROCESSED 6 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 6 TO 266
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA FAM SAM L1

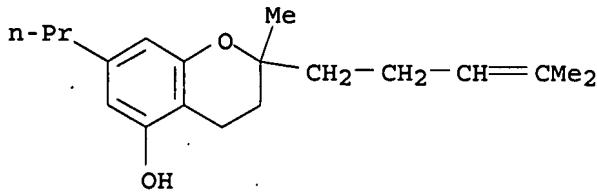
=> s l1 fam full
FULL SEARCH INITIATED 09:42:15 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 103 TO ITERATE

100.0% PROCESSED 103 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

L3 1 SEA FAM FUL L1

=> d scan

L3 1 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2H-1-Benzopyran-5-ol, 3,4-dihydro-2-methyl-2-(4-methyl-3-pentenyl)-7-propyl- (9CI)
MF C19 H28 O2



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> file caplus
 COST IN U.S. DOLLARS
 FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
68.15	68.36

FILE 'CAPLUS' ENTERED AT 09:42:36 ON 30 APR 2007
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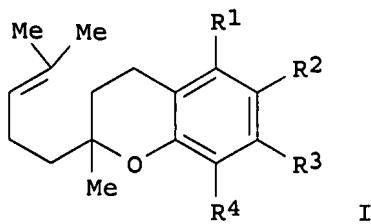
FILE COVERS 1907 - 30 Apr 2007 VOL 146 ISS 19
 FILE LAST UPDATED: 29 Apr 2007 (20070429/ED)

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 They are available for your review at:

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=> s 13
 L4 1 L3
 => d ti au abs so py

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
 TI Pharmaceutical compositions comprising cannabichromene-type compounds for the treatment of mood disorders
 IN Musty, Richard E.; Deyo, Richard
 GI



AB The invention relates to the use of cannabichromene-type compds. and derivs. thereof in the treatment of mood disorders. Compds. of the invention include I (r1 = OH; R2 = H, COOH; R3 - C1-8 alkyl; R4 = H) and derivs. thereof.

SO PCT Int. Appl., 35 pp.

CODEN: PIXXD2

PY 2005

2006

2006

=>